Florida Voter Registration System

Florida Voter Registration System
County/FVRS Interface Overview

Version 1.1

March 31, 2005

Florida Department of State
Division of Elections
FVRS Project Office
Room 231, Collins Building
107 West Gaines Street
Tallahassee, Florida 32399-0250
850.245.6200

Jeb Bush
Governor

Glenda E. Hood
Secretary of State

Revision History

Date	FVRS Version	SourceSafe Version	Description	Initials
02/21/2005	1.00	1	Copy Edit; Initial Baseline	
03/31/2005	1.1		Major revision: Added section 3 – definition of terms Voter Registration section 5 revised Suspense Processing section 6 revised Notification section 7 revised Added section 8 Assignment of Precinct and Political Jurisdictions Synchronization section 19 revised Match Processing section 20 revised Incorporation of Pending Status for new registration. Adding Application table, and clarification of Suspense processing.	

Table of Contents

1. Introduction 1
2. Assignment and Maintenance of a Unique Voter ID Number 3
3. Voter Registrations and Applications 4
4. Registration Processing and Disposition Terms 5
   - 4.1. Application Processing Status 5
   - 4.2. Application Dispositions 5
   - 4.3. Voter Registration Status 7
5. Voter Registration Processing by Counties 9
   - 5.1. New Voter Registration 10
   - 5.2. Updates to Existing Voter Registration Records 15
   - 5.3. Other Voter Registration Adjustments 18
6. Processing Suspense Applications 19
   - 6.1. Why Applications Become Suspended 19
   - 6.2. What Happens When an Application is Suspended 19
   - 6.2.1. How to Process a Suspended Application 19
7. Retrieving Notifications 21
   - 7.1. Introduction to Notifications 21
   - 7.2. The Retrieve Notification Process 21
   - 7.3. Frequency of Polling 21
   - 7.4. Retrieving and Processing a Single Notification Message 22
8. Assignment of Precinct and Political Jurisdictions 26
9. Petition Processing 27
10. Election Numbering 28
11. Absentee Processing 29
   - 11.1. Introduction 29
   - 11.2. Absentee Process Flow 29
   - 11.3. Absentee Temporary Address Update 29
12. Early Voting 30
13. Precinct Register Processing 31
   - 13.1. Introduction 31
   - 13.2. Register Supplement 31
   - 13.3. FVRS Register Supplement 31
   - 13.4. Register Freeze E minus 15 32
   - 13.5. Register Supplements 32
   - 13.6. Counties' use of the Supplements 32

14. Scheduling and Logging Correspondence with the Voter 34
15. Geographical Information Processing 36
15.1. County Upload of Street Data 36
15.2. Frequency of Update 36
15.3. Redistricting and Reprecincting 36
15.4. Updating FVRS for Redistricting and Reprecincting 37
15.5. Spelling Changes for Street Names 37
16. List Maintenance with FVRS 38
16.1. Odd Numbered List Maintenance 38
16.2. Returned Mail Processing 39
17. Bulk Data Transfers from County to FVRS 40
17.1. Absentee Update Transactions (AB01) 40
17.2. Voting History Bulk Update (VH02, VH01) 40
17.3. Streets File Bulk Transfer (ST01, ST02) 40
17.4. Redistricting Reprecincting Bulk Update (BU01) 40
17.5. Registration Verification File (SY01) 41
18. Bulk Transfer of Information from FVRS to County 42
18.1. Complete Dump of Voter Records (SY02) 42
18.2. Precinct Register List (PR01R) 42
18.3. Complete State Register (PR02R) 42
19. Synchronization Verification 43
19.1. Record Count and Status Verification 43
19.2. All Values Verification 44
20. Match Processing 45
20.1. Match Identification 45
20.2. Download of Match Records to SOE 45
20.3. Update of Match Records 45

1. Introduction

This paper focuses on the interoperability between counties, county voter registration systems and the Florida Voter Registration System (FVRS). The included discussion outlines procedures and methods for maintenance of:

- Voter registration records,
- FVRS notifications,
- Petitions,
- Absentee requests,
- Precinct Registers,
- Contact Management,
- Geographical Information Processing,
- List Maintenance,
- Synchronization of County Data, and
- Match Processing.

This paper does not discuss the internal structure or detailed specifications for any individual transaction included in the FVRS interface. The detailed design transaction design specifications provide definition of message structure and composition, security and associated workflow.

The term “Input” refers to transaction flow from County to State. Output refers to transaction flow from State to County.

The interface allows county systems to communicate with the FVRS for purposes of submitting voter registration applications, interrogation of records on the State system and for accessing notifications to counties. The FVRS does not provide an end-user interface. Rather, the FVRS system provides an platform for receiving requests and generating response messages to be processed by county voter registration systems. County administered voter registration systems will provide all end-user interfaces necessary to:

- Record input from county users
- Construct well formed FVRS requests
- Transmit requests to the FVRS
- Receive FVRS responses
- Format and present FVRS response data for end-user consumption.

This document overviews the business processes and the FVRS transactions that support them.

Counties retain responsibility for printing and mailing correspondence to the voters. Such items of correspondence may be triggered by FVRS and communicated to counties as notifications.

Notifications become items placed in FVRS notification queues by FVRS. County systems are responsible for polling notification queues, retrieving the notifications, and taking appropriate action as defined by the notification, and n acknowledging process

completion (NT03). A more thorough discussion of the notification process is provided in Section 7.

FVRS also provides a set of transactions for bulk updates of databases. Bulk updates can be from FVRS to the county, and also in the direction from county to FVRS. For these kinds of updates, data is assembled into a file and sent through a secure FTP process (SFTP.) An example of this kind of activity is the Precinct Register file that is downloaded from FVRS to the county. Another example might be the redistricting activity by a county, and updating the FVRS database with the effects of this redistricting.

2. Assignment and Maintenance of a Unique Voter ID Number

As required by HAVA, all voter registrations managed by FVRS will be assigned a unique “Voter ID Number.” This identification will be retained by a voter registration record for it’s complete life cycle. Any updates to an existing voter registration record shall not alter the Voter ID Number. Previously, changes in address from one county to another would have resulted in the cancellation of the registration in one county and establishment of a new registration in another, effectively severing any continuity between records of the two counties.

After January, 2006, all updates to an existing voter registration record will retain the assigned Voter ID Number. This will be true regardless of the type of update. This concept of preserving an assigned Voter ID Number is evidenced even in the case of a voter moving to another state. A registered voter who no longer legally resides in Florida will have his registration status changed to REM. If the voter returns to the state and applies for a new voter registration, a search of the FVRS will indicate his prior registration in the state. If the new registration is accepted, the applicant’s voter registration will be appended to the existing data on file, the Voter ID Number retained and the voter registration status updated to active. In other words the Voter Id number is intended to be constant throughout the voter’s life regardless of changes in status

3. Voter Registrations and Applications

When a voter registration application is submitted to FVRS, it is held in an application table until the application has been completely processed. A voter who is already registered may, therefore, have a registration record, and an unresolved application. This allows the official registration record to be maintained undisturbed while an application is being processed. Application records are linked to their parent voter record by the *FVRS Voter ID Number.* Each application record is further qualified by a sequence number assigned by FVRS upon receipt of an application.

This relationship between a voter record and one or more application records will also be implemented for new registrations where an existing voter record does not previously exist. Under this condition the relevant data elements from the application will be used to populate and create a voter record, generate a unique FVRS Voter ID Number and create an application record related back to the Voter Record.

4. Registration Processing and Disposition Terms

For the purpose of clarity, the following terms have a precise meaning in the context of FVRS.

4.1. Application Processing Status

An application status will be assigned to voter registration application submitted to FVRS. This designation defines a workflow or processing state and does not define an application's final disposition. A specific application's processing status may change during it's life cycle. The discreet processing statuses and definitions to be managed by FVRS are described below.

Status	Description
Suspended	Voter registration applications can be submitted to FVRS with a suspended status which will instruct FVRS not to apply further validity, verification or eligibility assessment procedures. A suspended application may be submitted by a county data entry operator for the purpose of later retrieval and completion of data entry or for the purpose of routing the application to another county for completion. Suspended applications should be attended to promptly by the assigned county to avoid delay in the registration process.
Pending	A new registration application is pending when it is received by FVRS and the application did not meet the criteria for a Denial or Incomplete disposition, and where the application is still being processed by the Department of State for the purpose of verification of Drivers License Number, Social Security Number, Felon, Decease, Incompetence and Duplicate conditions.
Closed	An application is closed when a disposition of the application is determined and assigned. The types of valid dispositions that may be assigned to an application are listed and described in Section 4.2.

4.2. Application Dispositions

An application disposition will be assigned to all voter registration applications submitted to FVRS for processing. This designation defines the standing of the ***application*** presented for processing and not necessarily the Voter Registration Status (see Section 4.3) of the ***registrant***. This distinction is important for applications received as updates for existing FVRS registrants. For instance, an "incomplete" application disposition for an existing eligible voter will not affect the registrant's current voter registration status. The discreet application dispositions and definitions to be managed by FVRS are described below.

Disposition	Description
Denied	Once an application is denied, the voter is provided a notification.
Incomplete	A voter registration application is complete if it contains the following

	information necessary to establish eligibility pursuant to s. 97.041: 1. The applicant's name. 2. The applicant's legal residence address. 3. The applicant's date of birth. 4. A mark in the checkbox affirming the applicant is a citizen of the United States. 5.a. The applicant's current and valid Florida driver's license number or , the identification number from a Florida identification card issued under s. 322.051, or b. If the applicant has not been issued a current and valid Florida driver's license or a Florida identification card, the last four digits of the applicant's social security number. c. In the case where an applicant has not been issued a current and valid Florida driver's license or Florida identification card or social security number, the applicant shall affirm this fact in the manner prescribed in the uniform statewide voter registration application. 6. A mark in the checkbox affirming An indication that the applicant has not been convicted of a felony or that, if convicted, has had his or her civil rights restored. 7. A mark in the checkbox affirming An indication that the applicant has not been adjudicated mentally incapacitated with respect to voting or that, if so adjudicated, has had his or her right to vote restored. 8. Original signature or a digital signature transmitted by the Department of Highway Safety and Motor Vehicles of the applicant swearing or affirming under the penalty for false swearing pursuant to s. 104.011 that the information contained in the registration application is true and subscribing to the oath required by s. 3, Art. VI of the State Constitution and s. 97.051. *Notes:* An application to update an existing registration that contains incorrect information or information that can not be verified may acquire an incomplete status. This will allow a notification to be generated, but will NOT alter the voter registration status. A voter that has a registration status of Active, Inactive or Pre-Registered cannot be moved to a Denied status. If a voter becomes ineligible an administrative process must be used to remove the voter.
Registered	The voter's registration record has been updated with all possible information

4.3. Voter Registration Status

Each voter maintained in FVRS will be assigned a Voter Registration Status which will determine the voter's eligibility to vote. The Voter Registration Status will be updated after an application is processed (application processing status "closed") and an application disposition has been assigned. The discreet voter registration statuses and their definitions to be managed by FVRS are described below.

Status	Description
Active	The voter is properly registered. The voter is eligible to vote in elections.
Inactive	There is one and only one way to acquire an active status. Each and every one of the following events must have happened in the correct order: • The voter had an active status • First class mail was returned undelivered from the residence address of record for the voter • An "Address Confirmation Final Notice" has been sent to the voter • No response was received from the voter for 30 days following the sending of the Final notice • At this point the voter becomes Inactive. The voter is still eligible to vote in elections, and is included in the precinct register. • Any "voter activity" by the voter (which broadly is voting, or written contact from the voter, or signing a petition) will restore the voter to Active Status • After two general elections the voter is moved to the "Removed" status.
Removed	The voter is no longer eligible to vote in an election, and will not appear in the precinct register. There are a number of reasons why a voter can be removed: • Failed to attend Admin Hearing • Office errors • Canceled • Deceased • Civil Rights Felon • Moved out of State. Request by voter • Adjudicated Mentally Incompetent • Office Duplicate Registration • Returned Mail, Inactive 2 yrs
Archived	Only voters with Removed Status can become Archived. The only purpose of doing this is to prevent long deceased voters from overwhelming valid voters when doing voter searches.
Denied	The person (citizen or not) was not a registered voter, and their most recent attempt at registration was denied.
Incomplete	The citizen is not a registered voter, and their most recent registration attempt was Incomplete.
Pre-registered	The voter has met all the requirements to be an Active voter but has not yet attained the age of 18. Pre-registered voters that will be 18 years old on or before the election date are included in the precinct register and are eligible

	to vote in the election, even with Pre-registration status. The voter must be 17 years old to pre-register.
Pending	Earlier versions of the specification identified Pending as a voter status. This is now being clarified. An application can have a pending status, but the citizen/person/voter does not appear in the voter table until an application has attained a Disposition. Therefore a voter cannot have a Pending Status.

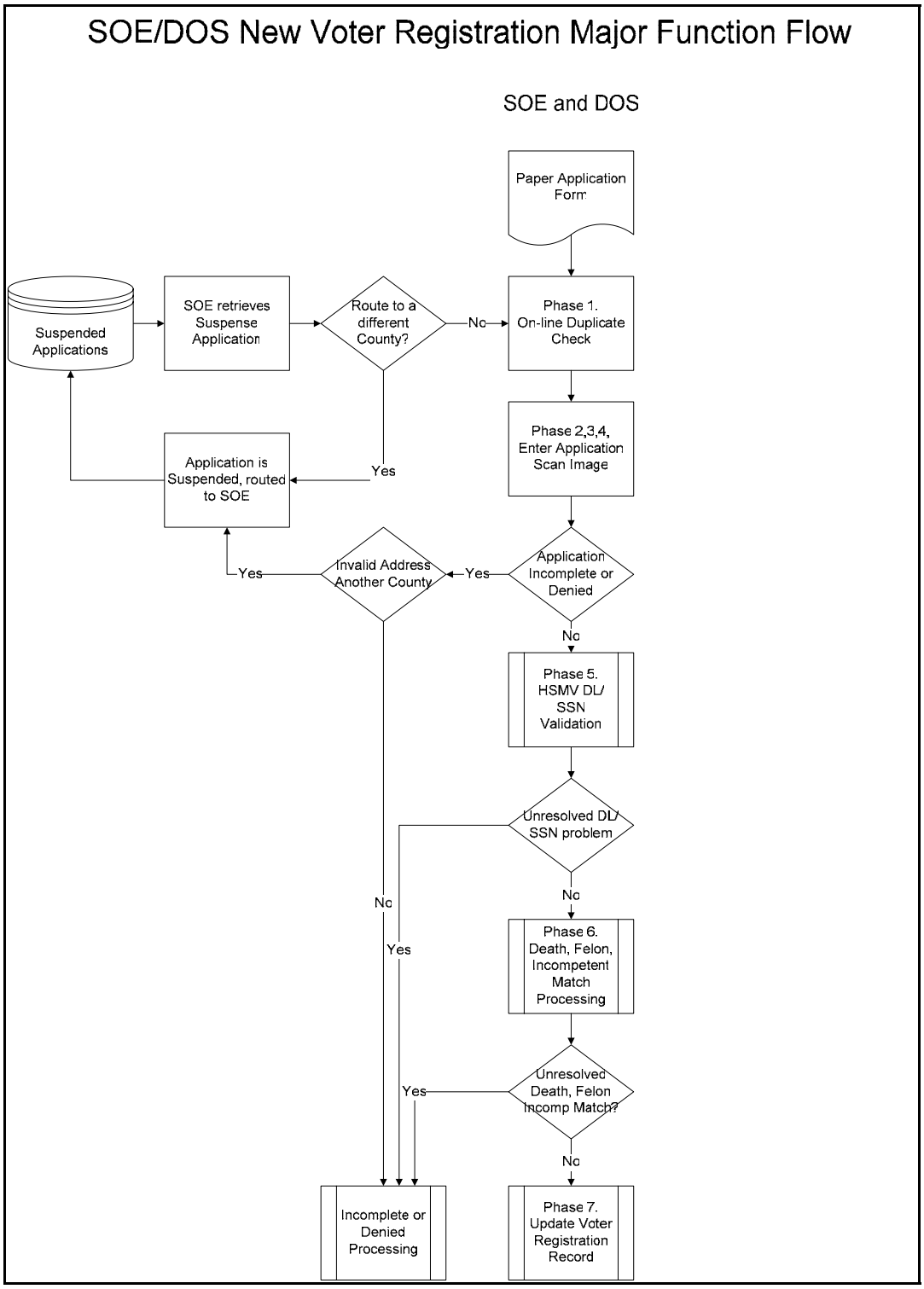
5. Voter Registration Processing by Counties

The following sections describe the typical steps a county voter registration clerk will execute to submit a registration application for a new voter to FVRS. The procedures described in this section do not include locally defined workflow or processing steps required by counties. Such locally defined steps may include document preparation or scanning of voter registration applications, but will typically not necessitate interface with FVRS.

Further, the steps outlined in this section assume that a voter registration clerk meets all county security requirements for access to the county voter registration system and the county security administrator has granted appropriate FVRS permissions.

While the following sections relate processing steps by voter registration clerks to transactions serviced by FRS, in fact, the county voter registration system in use will shield the clerk from any direct interface with FVRS transactions. The presentation layer of the county voter registration application shall provide all dialogues and data entry forms to be used by the clerk. The county voter registration system will generate the request to FVRS, receive the FVRS response and format the response message within the presentation layer of county system.

5.1. New Voter Registration



(This account is shown in the diagram above and the document “Voter Document Work Flow”)

Phase 1 Search for Existing Voters and Confirm New Registration Process

Before a new voter can be registered with FVRS, a search must be made of the existing voters. This is accomplished with the "New Registration" option of the Voter Search transaction (IQ08). Voter identity information such as voter id number, name, date of birth, etc. is submitted to FVRS via the IQ08 input message format, and FVRS returns a list of records matching the identity information. Based on the results presented, it is the operator's decision whether the application represents a new voter registration or an update to an existing registration record. This assessment should be completed for each application regardless of the applicant's selection of checked boxes on the application form.

This assessment will become particularly relevant during the critical months after the FVRS becomes operational. During this period most voters may not understand the distinction between a new registration and an update to an existing registration. This may be most evident in a change of address that results in a move between two counties. Prior to FVRS this event would have required the issuance of a new registration, however, after January, 2006 this same action will become an update to an existing registration.

The IQ08 transaction will search both application and voter records (see Section 3). The voter records being searched will include those that are removed ("REM"), administratively ("ADM") deleted and other voter registration statuses. If the voter has a voter registration status of other than "INA", or "ACT", or "PRE", then, even though there is an existing record, you should supply the FVRS Voter ID Number for that record in the RG01 transaction.

An existing *application* can be retrieved using IQ09, and an existing *voter record* can be retrieved using IQ01. County systems can display information from these transactions, to assist with data entry.

Phase 2 Enter Registration Details

The county's voter registration program accepts the details from the voter registration form and performs all local data validation edits such as valid dates, compliance with mandatory fields and other minimum data requirements. If the voter resides in the current county, the residence address should be validated against data maintained by the county system and the precinct and district information included in the voter registration details. The operator may now submit the application using the RG01 transaction to FVRS.

Phase 3 Edit and FVRS Voter ID Number Assignment

FVRS will reply to an RG01 transaction with an RG01R response. The RG01R response will include an FVRS Voter ID Number. The county voter registration system should display this number to the operator as an acknowledgement and in case local procedures direct this number to be recorded on external documents such as the original registration form. It is also essential that you use this FVRS Voter Id Number in all subsequent transactions concerning the same application.

If no errors are reported in the FVRS RQ01R reply, the processing for Phase 3 is complete and the voter record is given an application processing status of *pending* (see Section 4.1). Proceed to Phase 4.

An NAPP notification is created, which provides you an application acknowledgement. An FVRS IQ09 transaction may be used to retrieve the application processing status. Note that a period of time may elapse before the application completes all FVRS verifications and receives an application disposition (see Section 4.2).

FVRS will apply a phase 1 evaluation immediately to applications submitted through the RG01 transaction. This level of evaluation will be limited to checks for completeness, compliance with basic data format rules and consistency within application elements. Other business rules requiring further verifications against FVRS data or by other external agencies such as Highway Safety (driver's license) or the Social Security Administration (social security number) may take 24 hours or more to complete.

Any errors detected by FVRS upon receipt of the application will be reported in the RG01R reply. These error codes should be interpreted and displayed to the operator.

The operator may then correct the data entry and retry the transaction or make take one of the following steps to update the application processing status or the application disposition by processing an RG01 with an appropriate TransactionType.:

Action	Explanation
Suspend the Application	The suspended application is held on FVRS with the assigned FVRS Voter ID Number. The application may then be researched, retrieved and completed (see Section 6
Update the application disposition as "incomplete"	An NINC notification will be created. Appropriate communications to the voter will be scheduled by FVRS. An NWFL notification is created for an incomplete notice (RegIncomp) (see Section 14, "Scheduling and Logging Correspondence with the Voter")
Update the application disposition as "denied"	An NDEN notification will be created. Appropriate communications to the voter will be scheduled by FVRS.

Phase 4 Scan and Index the Application Image

Final adjudication of an application by the Department may require manual comparison of the voter registration application against other records to ascertain the accuracy of matching processes. This may be particularly true in the felon matching processes to take one example. Access to an image of the voter registration application may, therefore, be necessary to complete the application

processing. Thus, the application image should be scanned and transmitted to FVRS within 24 hours of entry of the application into the system.

The FVRS IM01 transaction may be used to transmit document images to FVRS and link them with the appropriate voter record. For each application there may be two images. One is the complete application image, and the other is a clipped signature.

For suspended applications, an NSUS notification is issued to the targeted county after the images have been received by FVRS. For Suspense applications, no further processing is done.

An application that receives a denied or incomplete disposition is fully processed, and only communications with the voter need to be generated.

New applications that are Pending, Denied or Incomplete update the voter's information on the voter table. Suspense applications remain on the application table and do not affect the voter record. For Pending applications proceed to Phase 5, otherwise proceed to Phase 8.

Phase 5 HSMV Verifies Drivers License Number and/or Last 4 Digits SSN

Only applications with a status of Pending (i.e., Phase 3 completed without errors) will be forwarded to HSMV for verification of driver's license numbers or last 4 digits of SSN. HSMV will execute verifications of driver's licenses and will determine one of the following:

- Drivers license is correct
- Drivers license number was not provided, but voter appears to have been issued a drivers license
- Drivers license is incorrect or does not match the name provided on the voter registration application

Where necessary HSMV will forward the necessary information to SSA for verification of social security numbers who will provide the following assessment:

- Invalid Data
- Multi Matches All Deceased
- Multi Matches All Alive
- Multi Matches Mixed
- Single Match Alive
- Single Match Deceased
- No Match Found
- System Error: Unable to Process at this Time

If the Drivers License was correct or SSN number verified, then proceed to Phase 6.

The Department will manually review errors and determine if the voter has made an error in reporting their drivers License Number of last 4 digits of the SSN.

- If an error was made, a NHMV notification is created. The county system then uses NT12 to retrieve information about the DL or SSN4 error. If the county determines the voter registration is in error, an RG01 is processed with a transactiontype of 'I; making the application incomplete. FVRS creates an NINC notification. Proceed to Phase 8.
- If the county determines that the registration is correct an RG01 transaction is processed with the HSMVOverride flag set to 'Y'. This progresses the application to Phase 6.

Phase 6 Match Process

Voter registration applications will be compared against FVRS data for potential death, incompetence, and felon matches. If a valid match is found, the voter's registration application is denied (DEN). If no match is found, proceed to Phase 7, FVRS Registration Update.

Phase 7 FVRS Registration Update

When the State makes a final determination on the status of a new registration attempt, FVRS creates a Notification to the county SOE for any required communications to the voter. These Notifications typically include pre-registration welcome letters, blank party letters and Voter ID cards. Each document to be sent to the voter will be a notification message.

An NNRG notification is created when a new voter receives an ACT or PRE status. NWFL notifications are created for each of the documents that the voter may receive:

- Blank Party letter
- Pre Registration Letter
- Voter Id Cards

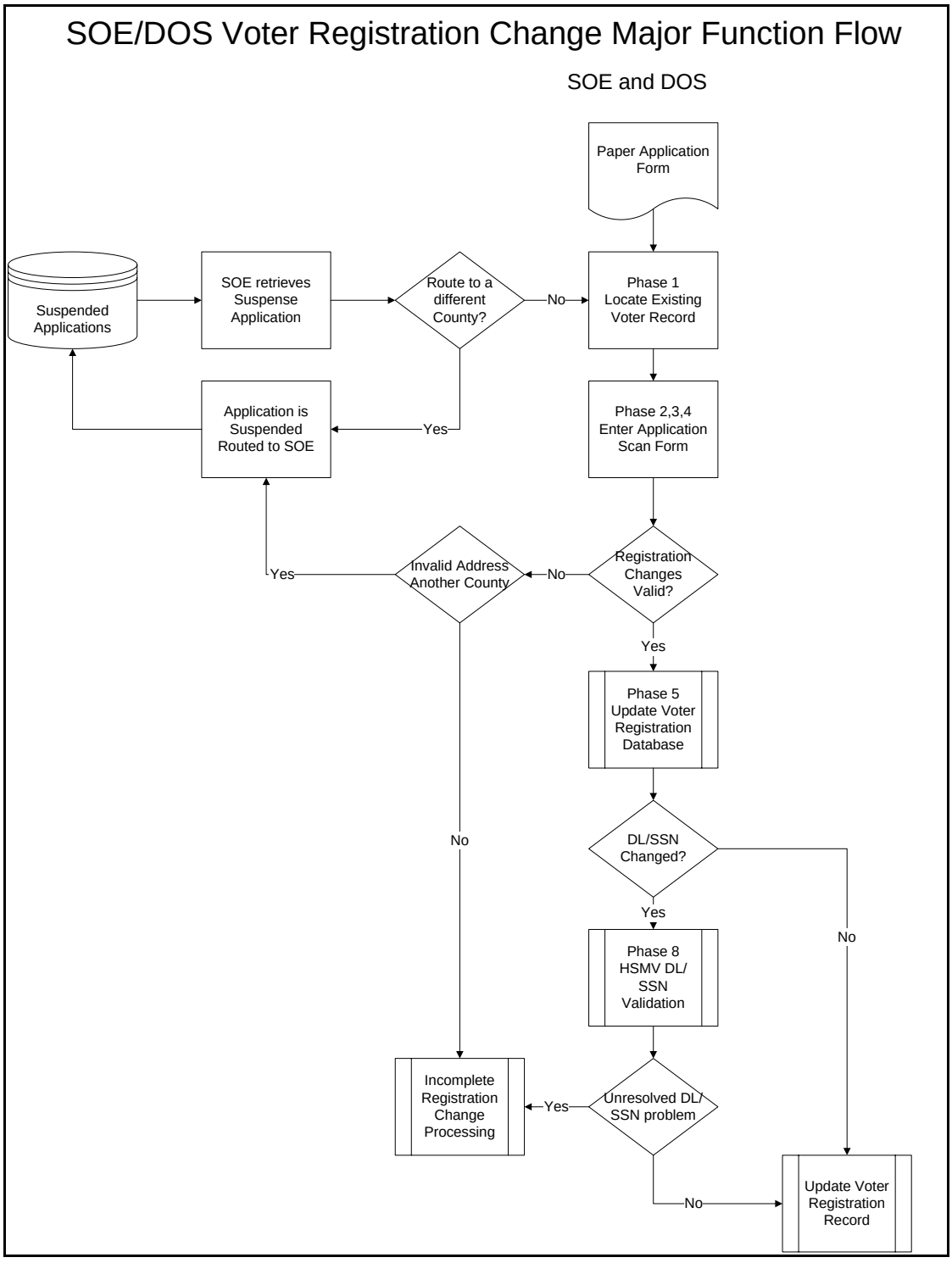
Phase 8 County Retrieves Notifications

Notification retrieval is a process execute by the county voter registration system. The purpose of this process is to retrieve notifications from FVRS. Through the notification retrieval process, any changes to the FVRS voter record may be retrieved, and the local database updated. It is only on retrieval of the notification that the county knows whether the new registration attempt has been completed and the disposition assigned to the application and voter registration status.

Phase 7 Voter Documents are printed

Contact workflow items are scheduled through the notification process for documents that need to be sent to the voters. When the county prints the documents, a "Registration Contact Add" (RG03) transaction is sent to FVRS.

5.2. Updates to Existing Voter Registration Records



(This account is shown in the above diagram and the document “Voter Document Workflow”)

Phase 1 Search for Existing Voters

Before an update can be applied to an existing voter registration record, a search must be made of the existing voters. This is accomplished with the FVRS IQ08 transaction. Voter identity information such as voter id number, name, date of birth, etc. is submitted to FVRS via the IQ08 input message format, and FVRS returns a list of records matching the identity information. Based on the results presented, it is the operator's decision whether the application represents a new voter registration or an update to an existing registration record. This assessment should be completed for each application regardless of the applicant's selection of checked boxes on the application form.

This assessment will become particularly relevant during the critical months after the FVRS becomes operational. During this period most voters may not understand the distinction between a new registration and an update to an existing registration. This may be most evident in a change of address that results in a move between two counties. Prior to FVRS this event would have required the issuance of a new registration, however, after January, 2006 this same action will become an update to an existing registration.

The IQ08 transaction will search all voter records (see Section 3). The voter records being searched will include those that are removed ("REM"), archived ("ADM") deleted, Pending ("PEN") and other voter registration statuses. If you are able to locate an existing record for the person being processed, you should supply the FVRS Voter ID Number for that record in the RG01 transaction. However also note that even if you locate the voter, if the current registration is anything else except ACT, INA or PRE, then a NEW registration needs to be processed. (Go to Section 5.1. New Voter Registration)

An existing *application* can be retrieved using IQ09, and an existing *voter record* can be retrieved using IQ01. County systems can display information from these transactions, to assist with data entry.

Phase 2 Enter Registration Details

The county's voter registration program accepts the details from the voter registration form and performs all local data validation edits such as valid dates, compliance with mandatory fields and other minimum data requirements. If the voter resides in the current county, the residence address should be validated against data maintained by the county system and the precinct and district information included in the voter registration details. The operator may now submit the application using the RG01 transaction to FVRS.

Phase 3 Error Handling in the RG01R

FVRS will reply to an RG01 transaction with an RG01R response. If no errors are found, the transaction is complete. The notification process detailed in Phase 6 is the official process for obtaining and maintaining the local copy of the voter record.

If for any reason FVRS has found errors, a list of the error codes will be provided with the RG01R. These error codes will be displayed to the operator. The operator may then correct the data entry and retry the transaction or if the errors cannot be resolved, the operator may suspend the application.

Phase 3A Registration Form is Scanned

Final adjudication of an application by the Department may require manual comparison of the voter registration application against other records to ascertain the accuracy of matching processes. This may be particularly true in the felon matching processes to take one example. Access to an image of the voter registration application may, therefore, be necessary to complete the application processing. Thus, the application image should be scanned and transmitted to FVRS within 24 hours of entry of the application into the system.

The FVRS IM01 transaction may be used to transmit document images to FVRS and link them with the appropriate voter record. For each application there may be two images. One is the complete application image, and the other is a clipped signature.

For suspended applications, an NSUS notification is issued to the targeted county after the images have been received by FVRS. For suspense applications, no further processing is done.

Phase 4 HSMV verifies Drivers License Number and/or Last 4 Digits SSN

If the change registration includes an update to Last Name, Date of Birth, Drivers License Number or SSN, the data will be revalidated by HSMV. If none of these fields have been updated, go to Phase 7, FVRS Registration Update.

HSMV will execute verifications of driver's license s and will determine one of the following:

- Drivers license is correct
- Drivers license number was not provided, but voter appears to have been issued a drivers license
- Drivers license is incorrect or does not match the name provided on the voter registration application

Where necessary HSMV will forward the necessary information to SSA for verification of social security numbers who will provide the following assessment:

- Invalid Data
- Multi Matches All Deceased
- Multi Matches All Alive
- Multi Matches Mixed
- Single Match Alive
- Single Match Deceased
- No Match Found
- System Error: Unable to Process at this Time

If the Drivers License was correct or SSN number verified, then proceed to Phase 6.

The Department will manually review errors and determine if the voter has made an error in reporting their drivers License Number of last 4 digits of the SSN. If the Department determines an error was made, an NHMV notification will be created. If the county agrees, the county generates a DlnUpdateReq letter. Application processing is complete. If the county confirms the information is correct, the county processes an RG05 transaction with HSMVOverride = 'Y'.

Phase 5 FVRS Registration Update

The FVRS update will write the information to the database, handle NVRA transaction tracking, write Voter Transaction information and the Contact information. FVRS will also create a notification queue entry for any required communications to the voter.

Each document to be sent to the voter will be a notification message.

A difference with existing voter registration records is that an address change may move a voter from one county to another. In this case the old county receives an NMVO notification and the new county receives an NMVI notification.

Phase 6 County Retrieves Notifications

Notification retrieval is a process execute by the county voter registration system. The purpose of this process is to retrieve notifications from FVRS. Through the notification retrieval process, any changes to the FVRS voter record may be retrieved, and the local database updated. It is only on retrieval of the notification that the county knows whether the new registration attempt has been completed and the disposition assigned to the application and voter registration status.

Phase 7 Voter Documents

Contact workflow items are scheduled through the notification process for documents that need to be sent to the voters. When the county prints the documents, a "Registration Contact Add" (RG03) transaction is sent to FVRS.

5.3. Other Voter Registration Adjustments

The transaction RG05 may be used for miscellaneous voter registration adjustments. While RG01 is focused on processing voter registrations and adjustments coming from the standard voter registration form (and the HSMV equivalent of the transaction), RG05 is a more compact and more flexible transaction that includes data elements not available on RG01. Mailing, Prior, and Homestead addresses, however, are not available on RG05 and thus the RG04 should be used to maintain this data.

6. Processing Suspense Applications

6.1. Why Applications Become Suspended

There may be conditions whereby the process for submitting an application for voter registration cannot be completed as a single step. Examples of such conditions are:

- Information on the voter registration application requires further adjudication by the voter registration clerk,
- A voter registration update received by one county requires completion by another county,
- Routing of transactions received from HSMV where a residence address cannot be resolved within the FVRS street and address table.

The suspense application processing status permits applications to be submitted to FVRS, an FVRS Voter ID Number assigned to insure tracking and monitoring as well as notification and routing to appropriate county jurisdictions. The application may be stored on FVRS for retrieval by the same county, or it may be stored on the FVRS for pickup and examination by another county.

6.2. What Happens When an Application is Suspended

The application information is presented to the RG01 transaction with the “Application Process Status Code” set to S. The application data is stored on the FVRS application table. An NSUS notification is created for the target county. The target county of the notification is defined by the “CountyId” field of the RG01 transaction. If a county “self-targets” a suspended application, it will receive an NSUS notification.

When you suspend an application for transfer to another county, it is essential that the registration form be scanned and submitted to FRS using the IM01 transaction with the FVRSVoterIDNumber.

6.2.1. How to Process a Suspended Application

The NSUS notification is available to counties through the NT01R notification transaction. The NT01R transaction will generate a list of notifications meeting the transaction input criteria. Included in the list of notifications will be a reference to the FVRS Voter ID Number which may in turn be used to retrieve the application information through the IQ09 transaction. The IQ02 transaction may be used to retrieve the application image if it is available. FVRS will generate an NSUS notification within seconds of the application becoming suspended while the suspending originating county may take a few hours to get the accompanying image onto the system.

A data element in the IQ09 transaction is the Application Process Status Remarks. This is an FVRS generated textual history of the application. This should be made visible to the end-user to avoid repeating a suspense action.

From the primary key information provided in the IQ09 transaction, other inquiry transactions such as IQ01 may be invoked to retrieve any existing voter record. The user then works with the application, and you present the amended application using the

RG01 transaction. You should NOT set the “Application Process Status Code” set to S unless you are seeking to re-suspend the application.

A suspended application processed to disposition, will automatically retire the suspended application, mark the application as closed, and mark the NSUS notification as fully processed.

7. Retrieving Notifications

7.1. Introduction to Notifications

The following are types of activities that create notifications:

- A new Voter Registration Record is introduced into a county's list or a change is made to an existing voter record
- A document is required to be sent to a voter (or non-voter in the case of incomplete or denied registration applications)
- Determination that the voter record already exists (Duplicate)
- Determination that the voter is ineligible to vote due to the following reasons:
  - is deceased,
  - has been adjudicated mentally incompetent and his or her mental capacity with respect to voting has not been restored,
  - has been convicted of a felony and has not had his or her civil rights restored
- An FTP file is readied to be downloaded to the county
- FVRS is making a request for an FTP file to be sent to FVRS

The architecture of the interface enables communication to be initiated by either the county system or FVRS. FVRS will maintain notification queues for each county. Each notification is assigned a unique notification number. The SOE system will poll the notification queues and retrieve FVRS Notification details.

When the county system has successfully retrieved a notification message, the county system sends a message to FVRS that removes the notification message from the queue.

A notification includes the notification number, notification type, FVRS Voter ID Number, Error Codes and date of the notification.

7.2. The Retrieve Notification Process

The first step of retrieving notifications is to retrieve a list of notification queue entries via the NT01 transaction. The information in the notification list is then used to retrieve additional notification detail information at which time a notification acknowledgement (NT03) is written to FVRS. This acknowledgement causes the notification to be removed from the queue. Next the county processes the notification workflow.

The NT01 transaction is designed so that counties have the option of creating multiple specialist notification retrieval programs. If the NT01R response has no rows in it, then wait for the period of the polling delay and try again.

7.3. Frequency of Polling

The process is intended to run continuously. FVRS will perform best if counties poll the queues frequently. Frequent polling means that the messages associated with notification handling will be shorter, and the queues being managed on FVRS will also be shorter. The optimal frequency of polling will depend on the size of the county, and the length of acceptable delay between a change being made to FVRS and information about that change being available on the local county system.

Each notification is assigned a notification type. Depending on the type, other transactions are used to retrieve the details. The types of notifications and the transaction used to retrieve the details are as follows:

Type	Description	Detail Retrieval
NHIS	Voter History Update File Available	NT04
NHMV	HSMV DL/SSN Match Error (FVRS to HSMV)	NT12
NSUS	Suspended Registration Record	IQ09
NNRG	This is a new registration notification.	IQ01
NMVI	This is an existing voter that is moving into the notified county	IQ01
NMVO	This is an existing voter that is moving out of the notified county	IQ01
NRCG	This a change to registration details	IQ01
NSIG	Signature Update Available	IQ02
NWFL	This is a work flow message requiring a document to be sent to a voter	NT05
NFEL	This is a new or changed Felon Match Record	MD01
NDUP	This is a new or changed Duplicate Match Record	MD04
NDEC	This is a new or changed Decease Match record	MD02
NMEN	This is a new or changed Incompetence Match record	MD03
NINC	This is an incomplete Voter Application	IQ01
NDEN	This is a denied Voter Application	IQ01
NALA	This is a request by the state to send all absentee statuses for specified election	AB01
NSTR	This is a request by the state to send a replacement street table	ST01, ST02
QVLR	Indicates a Full Voter Dump is available on the FTP site	NT04
RVFR	Indicates a Registration Verification file is available on the FTP site.	NT04
PRGR	Precinct Register File Available for Download	NT11
SRGR	Complete Register of Voters available for Download	NT04
NCOD	Code tables have changed	CU01
TSOL	Street Table overlap file available on FTP Site	NT04

7.4. Retrieving and Processing a Single Notification Message

7.4.1. NHIS Voter History Update Error File Available(NT04)

The batch file of Voting History Response records VH01R is available for pickup up. Use the NT04 transaction to retrieve information about the file.

7.4.2. NHMV Highway Safety (HSMV) Match Error (NT12)

The NT12 transaction is used to review the information returned to FVRS by HSMV for the validation of driver's license and/or social security number in voter registration records. When an error(s) is generated indicating that the data submitted to FVRS does not match HSMV records the NT12R will return the detailed HSMV information including error codes. In conjunction, an NSUS Suspense Notification will be sent for the FVRS record for review and disposition by the SOE.

7.4.3. NSUS Suspense Notification (IQ09)

A suspense record is a record that requires county intervention to process correctly. The returned detail information will be the IQ09R that is almost identical to the RG01 transaction, including error codes.

7.4.4. NNRG New Registration Notification (IQ01)

Submit an IQ01. The returned information will be an IQ01R transaction. This transaction contains all of the voter information held on FVRS. When required, a redistricting and reprecincting transaction (BU01) should be sent to FVRS setting the correct precinct and district assignments.

7.4.5. NMVI Move In Registration Notification (IQ01)

Submit an IQ01. The returned information will be an IQ01R transaction. This transaction contains all of the voter registration information held on FVRS. When required, a redistricting and reprecincting transaction (BU01) should be sent to FVRS setting the correct precinct and district assignments. Also, additional information on the voter should be retrieved from FVRS and loaded onto the local system to ensure correct processing of the voter. Counties have discretion about how much of this additional information they wish to store on their local database. However note that the absentee information and voter history information is important to ensure correct processing of Absentee voters who move between counties.

- Signature and Application Images, IQ02 (response IQ02R)
- Voter Transaction Information, IQ03 (response IQ03R). This is a record of the changes made to the voters' record and which county or agency made the changes.
- Voter History Information, IQ04 (response IQ04R). This is the voting history record of the voter. For Move-ins this is where information about early voting will be found for active elections.
- Absentee Information, IQ06(response IQ06R). This information is vital to ensure that absentee requests already in process are properly accounted for in the new county.
- Registration Contact Information, IQ07(response IQ07R). This will provide information about contacts with the voter prior to the voter moving to the county.

7.4.6. NMVO Move Out Registration Notification (IQ01)

Submit an IQ01. The returned information will be an IQ01R transaction. There are a number of situations where a "Move-out" voter will continue to be processed for some

time, for instance in the case where a voter votes early and then moves away. The Move-out voter will be a factor in voting history processing and reconciliation for the election in which he/she voted.

7.4.7. NRCG Registration Details Changed (IQ01)

Submit an IQ01. The returned information will be an IQ10R transaction. This transaction contains all of the voter registration information held on FVRS. When required, a redistricting and reprecincting transaction (BU01) should be sent to FVRS setting the correct precinct and district assignments.

7.4.8. NWFL Work Flow Notification (NT05)

Submit an NT05 transaction and then process the NT05R transaction. This is an instruction to send a document to the voter. The document type is part of the notification record. For denials and incomplete notices, error codes are provided as explanations. For some notices, the address to which the notice will be sent may be provided.

7.4.9. NFEL Felon Match Record (MD01)

Send an NT06 transaction and then process the NT06R transaction. The NT06R response is a multi-record type response with all of the current information for the felon match. For a new record, write a new one to your local database. For an existing match, overwrite the local details.

7.4.10. NDUP Duplicate Match Record (MD04)

Send an MD01 transaction and then process the MD01R transaction. For a new record, write a new one to your local database. For an existing match, overwrite the local details.

7.4.11. NDEC Decease Match Record (MD02)

Send an MD02transaction and then process the MD02R transaction. For a new record, write a new one to your local database. For an existing match, overwrite the local details.

7.4.12. NMEN Incompetence Match Record (MD03)

Send an MD03 transaction and then process the MD03R transaction. For a new record, write a new one to your local database. For an existing match, overwrite the local details.

7.4.13. NALA send all Absentee Status for a Specified Election (AB01)

This notification type carries no additional data. Send to FVRS an AB01 transaction for each absentee request for the specified election. This may be done as a bulk upload file.

7.4.14. NSTR Send Street Table (ST01, ST02)

This notification type carries no additional data. Send a replacement street table to FVRS. This is just a mechanism to allow FVRS to initiate a transfer that the county will routinely make. Please note that this notification is for a complete replacement of the FVRS street table, even though you normally only provide add/change/delete transactions to FVRS.

7.4.15. QVLR Full Voter Dump is available on the FTP site (NT04)

Use the NT04 to retrieve the name of the file to be retrieved from the FTP site. Then retrieve the FTP file. The file consists of transactions IQ01, IQ02, IQ03, IQ04, IQ06 and IQ07. The procedure for this file is to compare the values in the file with your database. Where the values differ, create a report of the difference. Based on the field that is in error correct the local copy of the database. If precinct or district information is different, then issue a BU01 transaction to correct FVRS.

7.4.16. RVFR Registration Verification file is available on the FTP site (NT04)

Use the NT04 to retrieve the name of the file to be retrieved from the FTP site. Then retrieve the FTP file. The file consists of SY01R transactions. This is an error file caused by synchronization errors detected by FVRS. Counties should create procedures to review the contents of this file.

7.4.17. SRGR Complete Register of Voters available for Download (NT04)

Use the NT04 to retrieve the name of the file to be retrieved from the FTP site. Then retrieve the FTP file. The file consists of PR02R transactions.

7.4.18. PRGR Precinct Register File Available for Download (NT04)

Use the NT11 transaction to find out the information about the file that is available for download. Download and process the PR01 records in the file onto your local database in preparation for printing your precinct register. Note that for Statewide elections, the generation of a new precinct register will be run nightly, and these notifications will be made available unsolicited. For local elections, the precinct register file is created in response to an input PR01 transaction.

7.4.19. NCOD Code Tables have Changed (CU01)

Use the CU01 to download changed code tables and localize them as necessary.

7.4.20. TSOL Street Table overlap file available on FTP Site

Use the NT04 to acquire the location of the file on the FTP site. Download the file, and process the ST02R errors.

8. Assignment of Precinct and Political Jurisdictions

The FVRS system design provides for a street address subsystem that enables counties to designate street addresses valid as residential addresses. Additional data stores and relational tables will provide a means for associating precincts with political jurisdictions. This information is to be maintained and updated by the counties and stored on the FVRS. (See Section 15,1) This functionality will be included in the January 2006 release of FVRS.

The FVRS will provide this data to HSMV for validation of addresses taken from voter registration clients in driver's license offices.

Based on the street address information stored in FVRS, the state system will issue a preliminary precinct assignment for voter registration applications received by the Department and from HSMV and forward this information to the county for verification and final commitment.

Voter registration records presented to the FVRS from county systems would be accompanied by a precinct assignment from county personnel.

In each of the above cases, the county would remain the final arbiter of precinct assignments for records within their jurisdiction. The county may override the FVRS precinct/district assignments using BU01. This transaction may be used in real time response or bulk update mode

During the period between implementation in January 2006 and the completion of 2006 general elections in November 2006, the Department will assess the continued accuracy of the street and address data and the use of this data for assignment of precinct and political jurisdictions by FVRS. The decision to shift the function for assignment of precincts from the county system to FVRS will be made after the 2006 elections.

9. Petition Processing

9.1.1. Introduction

FVRS will prevent the same voter from signing a specified petition more than once, even though the voter moves from one county to another during the time the petition signatures are being collected. FVRS will only provide this control on petitions that will be certified by the state. Since counties process many other petitions, it will be necessary for the counties to classify petitions as "state certified" or not.

9.1.2. State Petition Number to be added to County Systems

The county systems will have to add the FVRS petition number to their databases. A transaction (PP01) "Retrieve List of State Petitions" will allow you to present to your users a list of FVRS petition numbers for them to select the correct one, when setting up your petitions.

9.1.3. Petition Signature Processing

When processing a state certified petition, an additional verification step is added to the process. If you have completed your edits, and you are ready to accept the petition signature, you must send to FVRS a petition signed transaction (PP02). The response transaction will tell you if the voter has already signed this petition. If the petition has already been signed, you record the signature as a duplicate (with whatever error description you feel appropriate). If FVRS accepts the record, then go ahead and accept the petition signature.

A reversal flag in the PP02 transaction allows you to back out of FVRS a signature that you have accepted, but then want to reverse.

10. Election Numbering

Absentee requests and voting history are shared between counties. A unique statewide election numbering system is required. There will be two types of elections:

- Elections which the Dept of State certifies
- Other Elections

For elections that the Dept of State certifies, FVRS will have assigned election numbers before the counties need them. The CU01 transaction should be used to download a list of election numbers, and the correct number should be selected from that list.

For Other Elections, the “Assign New Election Number” (CU02) transaction allows the county system to obtain and reserve an election number. They must do this, and assign that number to their county and municipal and other local elections.

11. Absentee Processing

11.1. Introduction

When processing absentees for any election, if any status of the absentee request is changed, an update to FVRS is required. Sending the AB01 transaction and ensuring that a response is received is all that is required. E.g., one purpose of the process is to ensure that the voter's absentee status is transferred to the voter's new county following an address change.

11.2. Absentee Process Flow

The absentee update transaction (AB01) serves to send to FVRS the absentee status for a voter for a specified election. The error codes on return will all be associated with logic errors in implementing the interface. There are no errors that require operator correction.

11.3. Absentee Temporary Address Update

The AB01 transaction is used to update the absentee temporary address for a specific election.

12. Early Voting

FVRS will treat early voting differently from absentee processing. Voters who vote early should have a VH01 transaction sent to FVRS as soon as possible. In the event that the voter moves to another county after voting early, the notification download to the county will include voting history for the current election. This should be used by the county system to prevent the voter from voting again in the new county.

13. Precinct Register Processing

13.1. Introduction

The Section 303 of the HAVA bill requires the precinct registers to be prepared from a single statewide voter registration list. The Supervisors of Elections are responsible for creating the precinct registers. The HAVA bill provides that they must use FVRS as the source of data for its production.

This would be very straightforward if all the counties printed precinct registers at the same time. If the statutorily defined book closing was truly a freeze on the registration list for the period between book closing and the election, this could be straightforward. In fact, book closing only prevents party changes (for primaries) and new voters entering the registration list. Voters move around and they vote in their new county/precinct. They also continue to die, vote early and vote by absentee. One county, who exports their register to an external printer about 2½ weeks to go, claims that 30% of the register entries have some kind of change by election date. With voters now able to change their county of residence after the precinct registers is printed, this situation can only become worse.

For the precinct register to be accurate it needs to be prepared as close to the election as possible. For large counties, printers that will accomplish that are either prohibitively expensive or not available. (One or two 20 ppm printers will handle a county with 150,000 voters and most counties at this size or smaller print in house. However there are not 80 ppm printers to put a county of 600,000 voters in the same position.) Most of the large counties therefore use an external printer.

13.2. Register Supplement

Most counties have created some form of a Register Supplement or Register Correction process to help reduce the number of errors in the precinct register. To describe the process, let's assume that a register has been printed 10 days before the election. One day before the registers are to be distributed to the polling places, a report is printed consisting of the changes that need to be made to the register to bring it up to date. Some counties have the polling place clerks correct the register, while others correct the register in the office prior to distribution.

In some counties the process of correcting the register is an ongoing clerical effort all the way up to the time when the precinct registers are distributed to the polling places. Each day a report is printed of changes that have been made to the register since the previous report, and clerks make corrective entries into the printed register.

Some counties that print in house avoid this clerical effort by printing the register over the weekend prior to the election. They either print no supplement or a very small one the day before the election.

13.3. FVRS Register Supplement

Under FVRS, the register supplement can be defined as the information required to correct the Precinct Register. It contains information that became available after the Precinct Register was created.

13.4. Register Freeze E minus 15

Fifteen days before the election (Third Monday before the election) FVRS will create a frozen copy of the register roll. Tuesday, E minus 14, will be the first day that counties can download the official register. The purpose of the frozen version is to ensure that all voters appear in one precinct register. The register will then be consistent as of E minus 15. Counties that use external printers can then export to their printers at any point after E minus 14.

The freeze point needs to be as late as possible, to minimize the errors in the registers. There also needs to be a grace period after book closing to ensure that all newly registered voters have been cleared into the system.

13.5. Register Supplements

Each night after E minus 15, FVRS will create a revised register. All the records from the original register will be included in the revised register, but may be marked with codes indicating:

- No longer eligible
- Voted Early
- Voted Absentee
- Moved Out

The revised register will contain additional records. The codes will indicate the reason for the addition:

- Move in
- Registration Processed Late
- There may also be other status codes:
- Voted Early
- Voted Absentee
- Moved-Out (We have to account for the possibility of multiple moves during this period.)

Once a record has been added to a Register Supplement, it cannot be removed; it can only acquire other codes as its status changes.

[To minimize the transfer time for register files, two files are created by FVRS each night after E minus 15. One is a complete replacement, the other consists only of voter records that have changed or been added since the “register freeze” on E minus 15.]

13.6. Counties’ use of the Supplements

Because the register supplements contain the original complete register as well as the supplement, counties have a variety of paths that they can take to keep their register up to date. They can do **one or more** of the following:

- Print supplemental pages for Move-Ins;
- Print reports to assist the manual mark up of registers that are already printed;
- Print labels that overlay and correct a register entry;

- Print replacement register pages which replace changed pages;
- Print a complete register showing the original register entries and supplement information normally sorted for easy look up.

Counties may be slightly more up to date than FVRS for items such as Early voting, and counties should use that information to make their supplements as up to date as possible.

Counties should be required to show all voters that appeared in the original frozen register (Marked with appropriate codes.)

The use of supplements allows counties to be as accurate as their logistics permit, while preserving the integrity of the precinct register prepared from the statewide voter list.

14. Scheduling and Logging Correspondence with the Voter

The FVRS system initiates the provision of notices to the voter when this is connected with Voter Registration. Counties are responsible for printing and mailing the documents, and updating the FVRS system with the actions taken.

When FVRS issues a notice to a voter (e.g. Incomplete Notice or Voter ID card) it creates an NWFL notification. A county system receiving an NWFL notification obtains details of the correspondence to be sent through the NT05 transaction. This transaction contains the document type, reason codes (for incomplete and denial notices) and is necessary the address to which the document is to be sent.

FVRS defines sending certain documents to a voter or receiving certain communications from a voter. The list of communications or documents that FVRS will track is listed in the Data Dictionary.

FVRS Contact Type	Document Name	Document Desc
AbsRejLtr	Absentee Reject Letter	Absentee Reject Letter
AbsSigDif	Absentee Sig Difference	Absentee Signature Update Request
AddChgNtc	Address Change Notice	Sent to a voter at their new address when USPS returns mail undeliverable with a new address inside the state (currently inside the county)
AddNotice	Address Conf Notice	Address Confirmation Request. This is batch scheduled by the counties as their odd year List Maintenance Process
ChgPP	Change of Polling Place	Change of Polling Place
FelonLtr	Felon HMP Cert REM	All types of letters involved in the processing of Felons. ContactComments will contain additional details as necessary
Reg17Ltr	Welcome17	Pre-Registration Acknowledgement sent because a Voter ID card cannot be sent
RegCard	VoterCard	Voter ID Card
RegDenialFelon	Application Denial	Denial letter for known Felons.
RegDenialIncomp	Application Denial	Denial letter for known incompetents
RegDeny17	Denial U17	Denial Letter for U17 year olds
RegDupl	DuplicateRegistration	Duplicate Registration Notice
RegFnlNtc	FinalNotice	Sent on receiving undeliverable mail (NVRA Process)

RegInc	Incomplete Registration	Letter sent to voters who have an incomplete Registration.
RegNpaOK	NPAGoodRegistration	Letter required by statute to new registrants that failed to fill in a party

The documents will always be printed by the county. When county prints one of the documents being tracked by FVRS, the county should send an RG03 transaction to FVRS. If the document is being printed as a result of an FVRS notification, the notification number must be included in the RG03 transaction.

When receiving a document from a voter that is not being tracked by an FVRS workflow notification, you should send an RG03 transaction to FVRS. A notification number is not required in these circumstances.

15. Geographical Information Processing

The FVRS database will include a list of valid street table entries. This list is made up of the street tables from the 67 counties. In order to create a meaningful table, there are edit checks to the table to ensure that a given address does not appear in the street table more than once.

15.1. County Upload of Street Data

Counties update the FVRS street table with Add/Change/Delete transaction types of the ST02 transaction. To replace the table, SOE should send an ST01 transaction to clear the county's street table and then a string of ST02 addition transactions to insert all the new records. When adding records to the FVRS street table, each street segment is tested to see if it overlaps a street segment already on the street table. If it does, the new segment is not added to FVRS, and an error transaction ST02R is returned.

The FVRS street table is a list of acceptable residence addresses. If a county permits alias-street names to be used, the county should upload ST02 for each valid address spelling that is permitted.

15.2. Frequency of Update

For many counties, they will upload a complete replacement of their portion of the street table. It is recommended that this take place weekly. Other counties have developed incremental systems of geographical update. These counties may send incremental bulk updates to the street table, or may provide amending ST02 real time response transactions..

15.3. Redistricting and Reprecincting

Maintenance of the correct precinct and district assignments is a Supervisor of Elections responsibility. FVRS is not the source of information about precinct and district assignments. The FVRS will hold this information for the purposes of providing information services to qualified users. In the case of differences between the FVRS precinct and district assignments and the county's assignments, the county assignment will be deemed correct.

Counties use a variety of means for revising the district assignments and precinct assignments for voters. The process is usually done by changing the district assignments for a block of addresses (Street segment) and then changing voter records as necessary. If Geographical Information Systems (GIS) are in use, such as GeoElections which is based on MapInfo, the counties street table is replaced by the GIS. The County Voter System then identifies changed records and changes their precinct assignments. District reassignment logically follows the change in precinct-split.

When a voter's districts are changed, the SOE should schedule the release of a revised Voter ID card. When the card is printed, the SOE sends to FVRS an RG03 transaction indicating that a new voter card has been sent to the voter.

15.4. Updating FVRS for Redistricting and Reprecincting

When changes occur to the street table and the associated voter records, the county system must update the FVRS. This update will be in two parts:

- Replacement Street Table
- Changed Precinct and District Assignments for affected voters

These transactions may be assembled into a single bulk transfer file that is uploaded to the FVRS.

15.5. Spelling Changes for Street Names

As part of geographical information processing, the name of a street can change. FVRS supports a bulk transfer transaction to allow mass changing of street names. Each voter to be changed has a BU03 transaction written to the bulk transfer file. This transaction should not result in the release of a voter ID card.

16. List Maintenance with FVRS

List Maintenance is prescribed by NVRA. The List Maintenance process will remain a responsibility of counties after FVRS is implemented.

16.1. Odd Numbered List Maintenance

NVRA requires Elections officials to perform a systematic verification of voter addresses at least every 2 years in the odd-numbered years. The NVRA also requires the list maintenance process to complete 90 days before a federal election. It is normal process to time list maintenance so as not to interfere with local elections also.

The counties may start their list maintenance process at a time of their own choosing. Since the Secretary of State is the official registrar, FVRS will monitor the list maintenance process. This creates a requirement to keep FVRS updated with list maintenance processes. The BU02 transaction is used to do this. This is a multi-use transaction and all fields are required every time it is sent to FVRS.

These are the steps of List Maintenance and the updates sent with the BU02 transaction. This is not a detailed specification of how to use the BU02, other fields will have to be provided.

Action by/at County	Update to FVRS
Initial Address Confirmation is sent	Send RG03 transaction with a ContactType of “AddNotice”
Mail is returned undeliverable Schedule and Send a Final Notice	Send RG03 transaction with a ContactType of “RegFnlNtc”
Final Notice is Returned signed by voter	Send RG03 transaction detailing the receipt of the final notice from the voter. Ensure that VoterActivityFlag = Y (It may be required to scan and send the updated signature from the voter also.)
Nothing is heard from the voter for 30 days Make voter Inactive	Send BU04 transaction to FVRS VoterRegStatus = ‘INA”
After two general elections have past, and the voter still has the status of ‘INA’ Make Voter Ineligible	Send BU04 transaction to FVRS VoterRegStatus = ‘REM’

16.2. Returned Mail Processing

Normal returned mail processing is the same as for the Odd Numbered year processing, except that mail is returned undeliverable as part of the normal process of doing business with the voter.

Action by/at County	Update to FVRS
Mail is returned undeliverable Schedule and Send a Final Notice	Send RG03 transaction with a ContactType of "RegFnlNtc"
Final Notice is Returned signed by voter	Send RG03 transaction detailing the receipt of the final notice from the voter Ensure that VoterActivityFlag = Y. (It may be required to scan and send the updated signature from the voter also.)
Nothing is heard from the voter for 30 days Make voter Inactive	Send BU04 transaction to FVRS VoterRegStatus = 'INA"
After two general elections have past, and the voter still has the status of 'INA' Make Voter Ineligible	Send BU04 transaction to FVRS VoterRegStatus = 'REM'

17. Bulk Data Transfers from County to FVRS

CVDB used FTP to transfer information between the county and the state system. This process was reasonably successful, but tricky to administer. In particular the file numbering process made it difficult to keep the two systems in step. If the state fell behind processing, it would not necessarily process in the correct order, dislocating the handshake.

FVRS solves some of these problems by using interactive transactions for updates that must take place in a certain order. Bulk transfers are of files where the recovery procedure if they fail, is to resend the whole file. The loss of a file is not damaging to a process.

When a file is uploaded to FVRS, the SOE sends to FVRS a BU05, FTP File ready transaction. This triggers FVRS to retrieve and process the file. This is a much more secure process than the one used in CVDB, where a file was sometimes processed before the file transfer process was completed.

The following are the bulk transfers to the FVRS and what causes them to be sent.

17.1. Absentee Update Transactions (AB01)

State sends a NALA specifying the election it wants. The county system creates a bulk file consisting of an AB01 transaction for each absentee request it has for the election. The state processes these transactions replacing the current information with the new information.

A response file is created with an AB01R transaction for any AB01 transactions that had errors during processing.

17.2. Voting History Bulk Update (VH02, VH01)

The county initiates this transfer. The bulk transfer file consists of a VH02 transaction (clearing the existing voting history on FVRS) followed by multiple VH01 transactions. Multiple elections can be updated in the same file.

A response file is created listing any errors encountered during the run.

17.3. Streets File Bulk Transfer (ST01, ST02)

This transfer may be initiated by the county or by an FVRS NSTR notification. The bulk transfer file may start with an ST01 transaction that instructs FVRS to clear the county's street table records followed by multiple ST02 records.

A response file is created as the streets file is updated indicating any errors or overlap conditions that are encountered during the run.

17.4. Redistricting Reprecincting Bulk Update (BU01)

The requirement to use this bulk transfer file is caused by a redistricting or reprecincting operation at the county. For counties using a GIS, a transfer of a street table from the

GIS may result in changing the Precincts/Districts of many voters. Multiple BU01 transactions can be transferred through the Bulk Transfer process to bring FVRS in line. BU03 transactions that deal with bulk changes to residence addresses (for situations where a street's spelling is changed) may be included in this bulk transfer file.

A response file is created listing any errors encountered during the update run.

17.5. Registration Verification File (SY01)

This file is sent to FVRS by the county each week on a fixed schedule. FVRS will compare the contents of the SY01 file to the FVRS database. It will create a return file (SY01R) that will specify differences between the SY01 file and the FVRS database. (Please see Synchronization Verification).

18. Bulk Transfer of Information from FVRS to County

As for bulk transfer in the opposite direction, the information passed in this way can be re-extracted and retransmitted, if an attempt breaks down. When a file is prepared and available for download, a notification is placed in the notification file. This allows counties to regularly query the notifications list for files that are completed and ready. The following are the bulk transfers from FVRS to the county and what causes them to be sent.

18.1. Complete Dump of Voter Records (SY02)

This file is sent by FVRS in response to a SY02 transaction. This bulk transfer file contains all of the records for a given county, optionally including, transactional information, voting history information, contact information and absentee information. The dump will consist of groups of records (depending on the options selected.)

- IQ01R Voter Registration Details
- IQ02R Voter Signature
- IQ03R Voter Transaction Information
- IQ04R Voter History Information
- IQ06R Voter Absentee Information
- IQ07R Voter Registration contact information

A complete set of records will be provided for each voter before moving to the next voter. The file will be in FVRS Voter ID Number order.

18.2. Precinct Register List (PR01R)

This bulk transfer file is sent by FVRS in response to a PR01 transaction sent by the county. See “Precinct Register Processing.”

18.3. Complete State Register (PR02R)

The purpose of this bulk transfer is to place a complete state register of voters on polling place laptops. This file may also be used to speed up phone-bank processing at the Supervisor’s offices.

19. Synchronization Verification

Counties may maintain a local copy of voter registration data to support functions not requiring real-time access to the State system. Local copies may be created in full through data extracts from the State system or by verifying that a current local copy is synchronized with the State system. Establishment of a local copy of voter registration data may be the desired approach to support certain batch functions such as bulk mailing, generation of precinct registers, voter history updates or generation of candidate lists.

19.1. Record Count and Status Verification

Synchronization is maintained using Notification processing. It is verified using synchronization verification. It is critical to catch synchronization problems early. The verification test should be fully automated.

To verify the synchronization between a county database and the state we have to perform a comparison between the two databases. This cannot be accomplished unless processing is quiet, and the county has processed all notifications of voter registration changes This task can only be accomplished at weekends. The notifications that ensure synchronization of the FVRS database with the county database are NNRG, NRCG, NMVI, NMVO. Other notifications do not affect the key fields for Active or Inactive voters.

The county may upload a complete SY01 list of voters each weekend. This file is used to compare the county's copy of the voter registrations for their county with the FVRS Voter Registration list.

The synchronization test is focused on ensuring that key fields between FVRS and the county copy of the data are the same, and that the list of registered voters is the same in each place. All fields are that affect voter registration status are tested. Only Active, Inactive and Pre-registered Voters are compared. Pending, Removed, Archived, Denied are not compared. For a list of the fields see the SY01 transaction design.

The processing of notifications that ensure synchronization of the FVRS database with the county database should proceed at all times. So even though HSMV application processing may complete Friday Evening and Saturday morning, the county program that processes the NRCG, NNRG, NMVI, NMVO should be able to process outstanding notifications without human interaction.

The following timetable of weekend processing will provide for the regular synchronization test. This is a revised timetable designed to allow a synchronization test to be run as often as possible, without impacting critical operations close to elections. Times are specified as Eastern Standard Time.

1. HSMV processing for Friday are processed Friday evening and Saturday morning. For most business weeks, there should not be any transactions affecting voter registration status over the weekend. Even if voter registration entry takes place on Saturday (during election season) the notifications arising out of Saturday processing should easily be completed by 3am on Sunday Morning.

2. At 3:15 am Sunday morning, FVRS will make a reference copy of the FVRS database.
3. At 3:15 am on Sunday Morning, counties isolate the information required to create the SY01 file. They might do this by making a reference copy of their databases, or they may generate the SY01 file directly. After taking a reference copy, the counties may continue processing.
4. Counties send FVRS an SY01 file consisting of key data fields as soon as it is ready.
5. FVRS compares the SY01 file with the FVRS database. It creates a report of differences between the files. When the differences report is completed, FVRS sends a Notification message to the county. We expect that the comparisons will be taking place through Sunday. When a given county's comparison is done, an RVFR notification is created. The county may then download an FTP file of SY01R error records.
6. The county analyses the differences file. FVRS and SOE technical staff will need to resolve and explain differences. For most errors, remediation consists of processing an IQ01 transaction, and replacing the SOE values with FVRS values.

The expectation is that synchronization errors will be caused by application software faults. In the early weeks after implementation there will be a period when these faults are identified and eliminated. After that point, maintenance of software at the county or FVRS systems may introduce a synchronization fault. This process will identify these conditions quickly.

Under normal circumstances, there should be little or nothing going on at the county systems at 3am on Sunday morning. A pattern of little or no reported difference should be established. Should a large number of errors be reported when there is major activity on a Sunday morning prior to an election, these should not create undue concern. The weekend after the election the report should return to normal. A county with major operations taking place just prior to an election may decide to omit their weekly SY01 upload.

19.2. All Values Verification

During systems testing, and during the early implementation period, a more complete verification will be required. This processing is done at the county by requesting the complete registration list using the SY02 transaction. The resulting FTP file may contain voter registration information, signature information, absentee information, transaction information, contact information and voting history information. The file may be used for comparing FVRS values with the local values to locate any inconsistencies. Since local implementations may differ, it is the county systems responsibility to perform this comparison and define the procedures for resolving any problems.

20. Match Processing

The HMP system consisted of a process for identifying and processing “Match” records for Duplicates, Felons, Deceases, and Incompetence. The exchange of information between FVRS and SOE will maintain the same record formats as the FTP transfer process used by CVDB. However the process of updating will be changed.

20.1. Match Identification

The HMP system will run a batch process that identifies potential matches. Matches may be of the types Duplicate, Felon, Decease, and Incompetence. An interactive application will present these potential matches to a clerk who will mark improper matches as incorrect.

Felon matches will undergo a second stage of inspection by a lawyer. At this point the DOS is building a case file. The lawyer may also decide that the match is incorrect.

Matches that survive this inspection process are then passed to the SOEs for final determination.

20.2. Download of Match Records to SOE

Matches that have passed the prior step create notification types NFEL, NDUP, NDEC, NMEN, . Details of the match information will then be retrieved using the MD01, MD02, MD03, MD04 transactions.

For some match types, e.g Felon matches a process of communication with the voter and time for appeals will take place between the processing of the initial notification, and the closing of the match.

20.3. Update of Match Records

When the county process a match record, or updates a match status transactions the MU01 transaction is used to update FVRS with the changed match status.The MU01 transaction are validated real-time, and if required data is missing, or the FVRS Voter ID Number is invalid, an error response is provided. Otherwise a simple message acknowledgement is provided.

The status update transactions will be passed to the HMP system, HMP is a batch process. If errors are encountered during processing HMP will create an error file. The file is then processed into FVRS, and the error codes are translated into FVRS error codes. HMP may reject a transaction because the Old Status Code or Old Status Code Date does not match the information on HMP at the time of processing the transaction.

If the MU01 transaction is processed correctly, FVRS will issue notifications showing the changed information. These are notification types NFEL, NDUP, NDEC, NMEN.

The SOE may also change the Registration Status of the Voter to Removed. The BU02 transaction is employed to do this.